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ABSTRACT

Much more research has been done on the effectiveness of therapeutic techniques than on the client characteristics which mediate the effectiveness of these techniques. Research on client characteristics has concentrated on demographic variables rather than psychological characteristics such as client reactance. The Therapeutic Reactance Scale was developed to measure psychological reactance. An initial pool of 112 items was developed and administered to 130 college students. A subsequent item analysis identified 28 items as showing item-total test correlations of .30 or above. A factor analysis resulted in the identification of two factors, labeled behavioral reactance and verbal reactance. Internal consistency reliability coefficients ranged from .75 to .84 while test-retest reliability coefficients ranged from .57 to .60. Additional divergent validity data showed low correlations with the Beck Depression Inventory and the Spielberger State-Trait Anxiety Inventory. The results indicated that there does seem to be an identifiable construct of psychological reactance which is an individual difference characteristic stable over time. The concept of psychological reactance has particular application to paradoxical counseling, as the theory behind the use of paradoxical interventions predicts that some paradoxical techniques would be more applicable to reactant clients than compliant ones. Four pages of references are included. (Author/NRB)

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The Therapeutic Reactance Scale: Development and Reliability

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Running head: THERAPEUTIC REACTANCE SCALE

This paper is based on a presentation at the 1984 American Psychological Association Convention, Toronto.

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ABSTRACT

This study describes the development of the Therapeutic Reactance Scale (TRS) and presents reliability and divergent validity data. An initial pool of 112 items were developed and these items were administered to a group of 130 subjects. A subsequent item analysis identified 28 items as showing item-total test correlations of .30 or above. A factor analysis resulted in the identification of two factors, labeled behavioral reactance and verbal reactance. Internal consistency reliability coefficients ranged from .75 to .84, while test-retest reliability coefficients ranged from .57 to .60. Additional divergent validity data showed low correlations with the Beck Depression Inventory and the Spielberger State-Trait Anxiety Inventory. Results are discussed in terms of implications for counseling, especially the differential use of paradoxical interventions according to Paradoxical Theory.

The Therapeutic Reactance Scale (TRS): Development and Reliability

It has long been recognized that individual differences among clients on a number of dimensions are related to the process and outcome of counseling. Strupp (1978) has recently noted that, although clients differ on a host of dimensions which are related in complex ways, much more research has been done on the effectiveness of therapeutic techniques than on the client characteristics which mediate the effectiveness of these techniques. Garfield (1978) has reviewed the literature on the effect of client variables on process and outcome in psychotherapy and concluded that a number of demographic variables, such as class, educational level, and race tend to have an effect on such measures as premature termination, length of stay in therapy, and outcome. Wolkon, Moriwaki, and Williams (1973) found that low socio-economic status clients did not benefit as much from counseling as high socio-economic status clients. McKay, Dowd, and Rollin (1982) found significant race and educational differences in the ratings given by subjects to high and low social influence counselors. Black subjects and subjects with less education tended to rate the low social influence counselor higher and the high social influence counselor lower than white subjects and subjects with more education.

Most of the research on client characteristics affecting the process and outcome of counseling has been conducted on demographic variables; there has been less done on the effects of client psychological characteristics. One client characteristic that has shown clinical and theoretical potential for mediating a variety of counseling interventions is that of psychological reactance (Brehm & Brehm, 1981). J. Brehm's (1966) original theory of psychological reactance postulates that (a) individuals possess "free behaviors" that can be engaged in at the moment or at some future time and (b) the motivational state of psychological reactance will be aroused whenever an individual's free behaviors are eliminated or threatened with elimination. The motivational state will be directed toward the restoration of the eliminated or threatened behavior. Reactance potential, or the likelihood that the motivational state to restore threatened freedoms will be aroused in a given individual, can be conceptualized as an individual difference variable. However, reactance can also be aroused by characteristics of the situation as well. Thus, reactance should theoretically possess variance due both to individual differences and situational characteristics.

Reactance is conceptually similar to resistance, although the former is considered to refer to a motivational state, while the latter generally refers to specific actions in a particular

situation (Jahn & Lichstein, 1980). Resistance rather than reactance has been the concept most explored in earlier theoretical (Freud, 1917; Lewin, 1935, 1936) and empirical (Frank, 1944a, 1944b, 1944c) investigations.

Crucial to the validity of the distinction between resistance and reactance is the relative stability of reactance over time, a characteristic which would seem to be inherent in the definition. The literature has in fact referred to both stable and situation-specific factors in oppositional behavior, although the term "resistance" is usually applied to both. Goldstein, Heller, and Sechrest (1966) attributed resistance to change on the part of the client to several factors: characteristics of the client (e.g., defensiveness), the threat value of the counselor's communications, and negative perceptions of the counselor. The first of these factors could include reactance. One of Brehm's (1966) variables which was hypothesized to mediate the degree of client reactance, the importance of free behaviors, could be thought of as a relatively stable characteristic. Millon (1969) and L'Abate (1976) both speak of the reactance potential of particular individuals, or a need to defy others. As an example, the oppositional client is well-known to every counselor. This concept implies a relatively stable individual characteristic. On the other hand, Strong and Matross (1973) speak of resistance as arising from situation-specific variables involving a perceived

illegitimacy of the counselor's influence where the counselor does not possess an adequate power base. Thus, there would seem to be solid conceptual reasons for considering reactance to be distinct from resistance, although likely sharing a common variance.

The concept of psychological reactance has immediate implications for the practice of counseling, as it would be theoretically expected to mediate compliance with behavioral tasks (Jahn & Lichstein, 1980). In particular, the utility of specific paradoxical interventions (Weeks & L'Abate, 1982) has been postulated to rest upon two constructs: the client's perceived controllability of the problematic behavior and the reactance potential of the individual client (Dowd & Swoboda, 1984; Rohrbaugh, Tennen, Press, & White, 1981). Specifically, defiance-based paradoxical interventions are called for when perceived controllability is low and reactance potential is high, while compliance-based paradoxical interventions are called for when perceived controllability is low and reactance potential is low.

Perceived controllability as a variable in psychological change has been discussed by Strong (1984), who argues that paradoxical interventions undercut the functional utility of involuntary symptoms as a method of control over others. He has constructed a controllability scale (Beck & Strong, 1982; Strong, Wambach, Lopez, & Cooper, 1979; in order to measure clients'

perceived ability to control their symptom. A strong case can also be made for reactance potential as an important variable, however, since client symptoms are rarely perceived as free by the client (Dowd & Swoboda, 1984). Thus, it becomes important to have an easily-administered measure of client reactance potential in order to assess the impact of client reactance on the counseling process and subsequent outcome, as well as to decide what type of paradoxical interventions to use in particular instances, or whether they should be used at all with certain clients. Heretofore, crude behavioral measures, such as non-compliance with homework behavioral assignments (Dowd & Swoboda, 1984) or paper-and-pencil measures designed for other purposes (Kerr, Olson, Claiborn, Bauers-Gruenler, & Paolo, 1983) have been used.

Accordingly, the purpose of this study was to develop a paper-and-pencil measure of psychological reactance and to assess its internal consistency and test-retest reliability. In order to test for possible multidimensionality of the scale the total number of items was subject to a factor analysis.

Method

Subjects

Initial testing was done using 163 subjects drawn from introductory educational psychology courses at a large midwestern university. Approximately three weeks later, 141 subjects from the original sample were retested, the difference being accounted

for by subjects who did not return. Data for subjects who either did not attend both testings or provided incomplete data during a testing session were deleted, resulting in a final sample of 130 subjects. The majority of the subjects were in their early twenties, with about 75% of the sample being female.

Procedure

An initial pool of 112 items was developed by two faculty members and six graduate students in counseling psychology. The items were developed based on a careful examination of the definition of psychological reactance proposed by J. Brehm (1966). Each item was designed to be rated by subjects using a four-point Likert scale (strongly disagree, disagree, agree, strongly agree). Approximately half of the items were reverse-keyed in order to eliminate any effects of acquiesent response sets. The 112 items were administered to the subjects on each of the two testing sessions. The pool of items was labeled as a "Personal Attitude Inventory," with no other information being provided for the subjects regarding the nature of the scale.

Results

Item Analysis

An item analysis was performed on the 112 keyed item data, using both corrected item-total test correlations and factor analysis as criteria for item selection. There were 80 items showing corrected item-total test correlations less than .30.

Consequently, these items were deleted from the item pool. For the factor analysis, a principal-factor solution with iterated communalities was performed, and subsequently rotated using the Oblimin method. A two-factor solution was found to be the most interpretable, with four additional items being deleted due to low loadings (less than .35) on both of the factors. The remaining 28 item comprised the TRS. These items, along with their factor loadings, are shown in Table 1. The two-factor solution accounted for 21% of the total variance, with a correlation of .37 between the factors.

Insert Table 1 about here

The two extracted factors were labeled "Behavioral Reactance" and "Verbal Reactance," respectively. Scale scores were formed for each dimension by summing the keyed item scores for the items loading substantially on that dimension. For the three items that loaded on both factors, they were each designated as measures of the dimension for which they showed the highest loading. In addition, a "Total Reactance" score was formed by summing the keyed item scores of all 28 items. Reliability coefficients for the three TRS scales are shown in Table 2.

Insert Table 2 about here

Further evidence for the reliability and validity of the TRS was reported by Lukin (1984), who, using a different sample of subjects, found a one-week test-restest correlation of .76. Lukin also found evidence of divergent validity through negligible correlations of the TRS with the State (.11) and Trait (.06) scales of the State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970) and a .11 correlation with the Beck Depression Inventory (Beck, 1967).

Discussion

The results of the present study indicated that there does seem to be an identifiable construct of psychological reactance which is an individual difference characteristic stable over time. Internal consistency reliability was acceptably high and test-retest reliability on two separate samples demonstrated a reasonable stability over time. Furthermore, the reliability coefficients were approximately the same for the two subscales and the total scale, lending credence to the idea that there are two identifiable aspects to reactance. This was further buttressed by the relatively low correlation between the two scales, indicating that they are somewhat discrete entities. Nevertheless, the correlation of .37 was high enough to suggest some overlap and justify the use of the total score as a meaningful measure.

The reliabiity coefficients may appear modest, but correlations of this magnitude are not uncommon in measures of this nature. For example, Peterson, Semmel, Von Baeyer, Abramson, Metalsky, & Seligman (1982) report internal consistency reliabilities on the Attributional Style Questionnaire (ASQ) from .44 to .69 for the separate attributional dimensions and .75 and .72 for the major dimensions. In both the ASQ and this scale, the test-retest correlation coefficients are of such a magnitude as to suggest that the constructs to be measured possess both individual differences characteristics and situational characteristics. In other words, client oppositional behavior is likely to be aroused both by aspects of the situation and aspects of the person. Nevertheless, there appears to be justification for considering much oppositional behavior as arising from individual differences.

We suggest therefore, based not only on these results, but on past research and conceptualization (e.g., J. Brehm, 1966; S. Brehm, 1976) that a clear distinction be made between reactance and resistence. The former can be defined as oppositional behavior that is 1) relatively stable over time, and 2) a characteristic of the person. The latter can be defined as oppositional behavior that is: 1) relatively unstable over time, and 2) characteristic of the situation.

The concepts of verbal reactance and behavioral reactance

seem to have common sense appeal. All of us have perhaps encountered individuals whose reactance was primarily verbal or primarily behavioral. These constructs have been labeled differently in different systems of therapy (e.g., passive-aggressive personality, non-compliant person), but the underlying similarities seem clear.

There appear to be a number of implications for counseling practice and research from this study. The effect of client oppositional behavior on counseling process and outcome has been widely discussed recently in the literature. Jahn and Lichstein (1980) have deplored its neglect in the behavior therapy literature, perhaps because of its psychodynamic overtones. More recently, Wilson (1984) has extensively discussed resistance from a behavioral perspective (which he seems to equate with non-compliance with treatment tasks). Among the variables that he considers as being responsible for non-compliance are person-specific characteristics, such as the "clients' individual makeup." He also refers briefly to the use of paradoxical methods, such as joining the resistance, as being potentially useful in increasing treatment compliance. The increasing attention being paid to client resistance (however conceptualized) would seem to indicate that now is an auspicious time to explore more fully the effect of client reactance and resistance on therapeutic progress. It would therefore be extremely helpful to

have an easily-administered measure of reactance available so that counselors might be able to tailor their techniques to the particular client. It is possible that some techniques might work best with reactant clients, others with non-reactant clients. Only further research will be able to identify which strategies will work best with what type of client. For example, many indirect forms of suggestions and utilization techniques have been hypothesized to be of particular utility with potentially oppositional clients (Dowd & Swoboda, 1984; Goldfried & Davison, 1976).

The concept of psychological reactance has particular application to paradoxical counseling, as the theory behind the use of paradoxical interventions predicts that some paradoxical techniques would be more applicable with reactant clients while others would be more applicable with non-reactant (or compliant) clients. Future research should be conducted to test hypotheses derived from this theory.

Further reliability and validity studies should be undertaken on the Therapeutic Reactance Scale itself. In particular, it would seem to be important to conduct additional convergent and divergent validity studies to determine whether reactance scores correlate with external criteria of reactance and to separate the concept of reactance from other concepts. It would also be desirable to conduct outcome studies comparing the use of

different therapeutic interventions with clients possessing high and low reactance scores. Likewise, further reliability studies should be undertaken to assess test-retest reliability over differing client samples and longer time spans. Only in this manner can the utility of the concept of psychological reactance be explored fully.

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Table 1

Factor Loadings of the TRS Items

Item[a]	Factor Loadings[b] Factor I	Factor II
1. If I receive a lukewarm dish at a restaurant, I make an attempt to let that be known.	.40	
2. I resent authority figures who try to tell me what to do.	.36	
3. I find that I often have to question authority		.41
4. I enjoy seeing someone else do something that neither of us are supposed to do.	.53	
5. I have a strong desire to maintain my personal freedom.		.44
6. I enjoy playing "Devil's Advocate" whenever I can.	.52	
7. In discussions, I am easily persuaded by others. (R)		.60
8. Nothing turns me on as much as a good argument!	.40	.38
9. It would be better to have more freedom to do what I want on a job.		.48
10. If I am told what to do, I often do the opposite.	.60	
11. I am sometimes afraid to disagree with others. (R)		.59

Table continues

	Item[a]	Factor Loadings[b] Factor I	Factor II
12.	It really bothers me when police officers tell people what to do.	.37	
13.	It does not upset me to change my plans because someone in the group wants to do something else. (R)	.48	
14.	I don't mind other people telling me what to do. (R)		.36
15.	I enjoy debates with other people.	.38	.51
16.	If someone asks a favor of me, I will think twice about what this person is really after.	.54	
17.	I am not very tolerant of others' attempts to persuade me.	.39	.36
18.	I often follow the suggestions of others. (R)		.38
19.	I am relatively opinionated.	.40	
20.	It is important to me to be in a powerful position relative to others.	.42	

Table continues

Item[a]	Factor Loadings[b]	
	Factor I	Factor II
21. I am very open to solutions to my problems from others. (R)	.42	
22. I enjoy "showing up" people who think they are right.	.41	
23. I consider myself more competitive than cooperative.	.44	
24. I don't mind doing something for someone even when I don't know why I'm doing it. (R)		.43
25. I usually go along with others' advice. (R)		.50
26. I feel it is better to stand up for what I believe than to be silent.		.48
27. I am very stubborn and set in my ways.	.50	
28. It is very important for me to get along well with the people I work with. (R)	.39	

[a]-Items followed by an "(R)" are reverse keyed.

[b]-Only factor loadings of .35 or greater are reported.

Table 2

Reliability Coefficients for the TRS Scales

Scale	Number of Items	Reliability Coefficients: Internal Consistency[a]	Reliability Coefficients: Test-Retest[b]
Behavioral Reactance	17	.81	.60
Verbal Reactance	11	.75	.57
Total Reactance	28	.84	.59

[a]-Cronbach's alpha was used as a measure of internal consistency.

[b]-There was approximately a three-week period between testings.